While the shell of this species has all the appearance of a Sonorella, the soft anatomy shows that it belongs to the subgenus Micrarionta, of Epiphragmophora, represented by E. gabbi, facta, stearnsiana, etc., the genitalia being typical for that group. In Sonorella I have figured the anatomy of eight species and subspecies. All agree in having a well-developed penis, and the flagellum is excessively short or wanting, usually about half a millimeter long, in one case one mm. long, but its length is always a very small fraction of that of the epiphallus. In no Sonorella is there any trace of dart sack or mucous glands. This is very unlike these organs in E. hutsoni.

The unexpected internal anatomy of this species emphasizes the uncertainty of dealing with Sonorella-like Helices without examination of the soft anatomy. How many of the supposed Sonorellas of southeastern California may really prove to belong to Micrarionta is problematic, but perhaps all those with the embryonic sculpture like E. hutsoni will eventually be removed from Sonoralla.

## EXPLANATION OF PLATE IX.

Figs. 1-3. Epiphragmophora hutsoni, shell.

- 4. Apex, enlarged.
- 5. Teeth.
- 6. Genitalia.
- 7. Jaw.
- 8. Diagram of dart sack and mucous glands. d. s., dart sack; epi., epiphallus; fl., flagellum; m. gl., mucous glands.

## DESCRIPTIONS OF CYPRAEA BERNARDINÆ AND CALLIOSTOMA CARNICOLOR N. SP.

BY H. B. PRESTON.

CYPRAEA BERNARDINÆ n. sp. Pl. VIII, fig. 8.

Shell oval, with a well-defined dorsal line dividing into a small fork near the anterior extremity; dorsal surface brownish-gray flecked with white spots and streaks; sides white, sparsely spotted with chestnut, a number of dashes of the same color appearing at the anterior extremity and slightly crenulated at the margins of the dorsal surface; extremities obtuse; base white; columella somewhat straight, bearing seventeen rather fine, white teeth; peristome very slightly curved, having fifteen teeth; aperture narrow.

Length 28.50 mm., greatest breadth 20 mm.

Hab.: Celebes (?).

A striking shell, whose nearest ally is perhaps Cypraea turdus Lk. From this, however, it may be easily distinguished by the remarkable white flecking on the dorsal surface, by the finer and more numerous teeth on the columella and the narrower and straighter aperture; moreover, it is much flatter than is the case with Cypraea turdus.

CALLIOSTOMA CARNICOLOR n. sp. Pl. VIII, figs. 6, 7.

Shell conical, keeled, imperforate, somewhat glossy, flesh-colored; spire concave; whorls 8-9, the last three rapidly increasing and much flattened, sculptured with nodulous spiral ridges, almost every alternate nodule being of a rich chestnut-brown; sutures not well defined above, and only slightly impressed between the last whorls; base very inflated and sculptured with closely-set spiral ridges intercepted by lines of growth, thus presenting a coarsely, granular appearance; columella arched, reflexed outwards, forming a thick callosity over the umbilical area, a slight callosity extending upwards to the lips above; peristome simple; aperture subquadrate; interior of shell nacreous and irridescent.

Alt. 41 mm., diam. maj. 53 mm.

Aperture, alt. 25 mm., diam. maj. 25 mm.

Hab.: Celebes (?).

The above shell at first sight much resembles Calliostoma cunninghami Gray, from New Zealand; the spire is, however, more concave, the last whorls are much more flattened and expanded outwards, and the nodulous spiral ridges are far less numerous than is the case with that species; moreover, the inflation of the base easily separates it from C. cunninghami.

## DESCRIPTION OF A NEW BIFIDARIA (B. AGNA).

## BY H. A. PILSBRY AND E. G. VANATTA.

When working on Bifidaria pentodon some time ago we found one specimen of a species evidently distinct though related to that, from "Silver Lake, Kansas," collected by Mr. J. B. Quintard. Recently a few more examples of the same form were found in river débris